

REMARKS/ARGUMENTS

The specification has been amended to make editorial changes to place the application in condition for allowance at the time of the next Official Action.

Claims 1-27 were previously pending in the application. New claims 28-35 are added. Therefore, claims 1-35 are presented for consideration. Claims 1-15 are withdrawn from consideration as being directed to a non-elected species.

Claims 16-27 are rejected as being unpatentable over MIYAJIMA et al. 4,652,932 in view of DOI JP 3-116898.

Reconsideration and withdrawal of the rejection are respectfully requested because the reference does not disclose or suggest: 1) providing a board used for a liquid crystal display screen fixedly attached to the liquid crystal display screen; 2) displaying an image on the liquid crystal display screen; and 3) operating an operating member through the hole from the other side while viewing the image as recited in claim 16 of the present application.

By way of example, Figure 5 of the present application shows a circuit board 13 fixedly attached to liquid crystal panel 11 by back light module 24. As disclosed on page 32, line 22 through page 33, line 3, a single-side controllable type operating member can be adjusted while observing the display on the liquid crystal display screen.

As seen in Figure 1(b) of MIYAJIMA et al., for example, the display screen 94 is rotatably attached at shaft 26 to lower shell 14. As further seen in Figures 3 and 5(a), the board 102 (104) that contains variable resistor 118 is connected to lower shell 14. Accordingly, the display 94 (66) is rotatable with respect to circuit board 102 (104) and is not fixedly attached to the liquid crystal display screen as recited in claim 16 of the present application.

In addition, column 4, lines 21-31 of MIYAJIMA et al. teach that incident light 31 passes through liquid crystal display panel 94 and is reflected from mirror 97 towards the user to provide a high degree of reflectance and minimize the amount of incident illumination absorbed. Accordingly, the image of MIYAJIMA et al. is displayed on mirror 97 and not on the liquid crystal display screen as recited in claim 16 of the present application.

Further, the Official Action states that MIYAJIMA et al. do not explicitly go into any great details of the mounting of the variable electronic element. Such assertion is not supported by the reference. Specifically, it appears that MIYAJIMA et al. teach brightness control slider 54 for adjusting the brightness of the television picture. As seen in Figure 1(b) of MIYAJIMA et al., this control 54 is on the side (end) of the device of MIYAJIMA et al. Thus, any control would be from the

end, not an operating member on a side opposite to a mounting side of a board as recited in claim 16 of the present application.

The Official Action states that it would be obvious to modify the variable electronic element of MIYAJIMA et al. with the teachings of DOI to render obvious the claims of the present application.

DOI is cited for the teaching of operating the operating member through a hole. However, the complete recitation is operating the operating member through a hole from the other side while viewing the image. Comparing Figures 1 and 2 of DOI, it appears that the elements of Figure 1 (see reference numerals 4 and 5) are inserted into a casing such that the operating member (screw 16) appears to be inaccessible while the device is in operation. Accordingly, it could not possibly serve as an operating member that a user operates through the hole from the other side while viewing an image, as recited in claim 16 of the present application. Applicant is unable to determine where the hole would be placed in MIYAJIMA et al. such that the combination would be obvious. Further clarification is respectfully requested.

In addition, MPEP §2143.01 states that the mere fact that references can be combined or modified does not render the resulting combination obvious unless the prior art also suggests

the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

As noted in the Official Action, DOI does not teach a liquid crystal display apparatus. DOI teaches a disk reading apparatus 1. Further, DOI does not teach that a variable volume resistor is desirable to replace a variable brightness control especially, since the brightness control of MIYAJIMA et al. is the slider control and the control of DOI is a screw.

Accordingly, *prima facie* in the case of obviousness has not been established and reconsideration and withdrawal of the rejection are respectfully requested.

The dependent claims also include features not disclosed in the combination of references. For example, claim 18 recites that the variable electronic element is mounted through a flexible printed circuit. As seen in Figure 6B of the present application, flexible printed circuit 16 is used to mount variable electronic element 15. Claim 20 recites that the variable electronic element is floated on the flexible printed circuit. As seen in Figure 6B of the present application, variable electronic element 15 is not rigidly attached to a rigid element but is attached to the flexible printed circuit such that the variable electronic element appears to float on the flexible printed circuit. Claim 22 recites that the variable electronic element overlaps a liquid crystal display screen as shown in

Figure 5 of the present application. None of these features are disclosed in the references and thus these claims are believed patentable regardless of the patentability of the claims from which they depend.

Claim 23 also recites a signal processing circuit board and a liquid crystal display screen electronically and fixedly connected to the signal processing circuit board. The comments regarding claim 16 are equally applicable to claim 23.

In addition, claim 23 recites that the variable electronic element is provided in an opposed side opposed to the displaying side of the liquid crystal display screen such that the operating member is exposed in the opposed side through the hole. As seen in Figure 5 of the present application, the opposed side is opposite to the front side of liquid crystal panel 11 (the displaying side) and the operating member 15a is exposed in the opposed side through the hole 31.

Modifying MIYAJIMA et al. as suggested in the Official Action would place a variable controller on the underside of the device of MIYAJIMA et al. through shell 14. A user attempting to adjust the display of MIYAJIMA et al. would find it very difficult to balance the device and turn the screwdriver (to adjust the variable controller) while still viewing the display because in order to operate the proposed variable electronic element, the operator would not be able to place the device of

MIYAJIMA et al. on a flat surface. MPEP §2143.01 states that if a proposed modification or a combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The device of MIYAJIMA et al. is designed to rest on a flat surface and then be controlled by the control slider 54 on the end of the device. Having a variable control element as suggested in the Official Action would necessarily place the variable control element underneath the device (on the surface upon which the device should be resting) in order to meet the recited structural location of the device as recited in claim 23.

Accordingly, such modification would change the principle of operation of MIYAJIMA et al. and in fact would make the device of MIYAJIMA et al. harder to operate (not easier as suggested in the Official Action) and thus the teachings offered in the Official Action are not sufficient to render the claims *prima facie* obvious. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

New claim 28 recites that an attachment member is fixedly attached only to the board at only the first side of the board and that a variable electronic element is connected to the attachment member and has an operating member that is accessible

through the hole from a second side of the board. New claims 29-32 show the specific attachment member as seen in Figures 6-10 of the present application.

By way of further explanation, an object of the present invention is to use a variable electronic element that is not limited to one particular location. Specifically, as seen in Figure 5 of the present application, a gap 40 exists between circuit board 13 and liquid crystal panel 11. The variable electronic element 15 can be placed anywhere along this opening 40 because it is suspended from the circuit board 13 using the attachment device 16, 33 or 35 shown in Figures 6-10 of the present application.

MIYAJIMA et al. do not disclose the details of the attachment of the variable electronic element and the processing board. Figure 1 of DOI shows that attachment member 12 is connected at 15 to board 13 and is also attached to members 4 and 5. Accordingly, the attachment member of DOI is not fixedly attached only to the board and only at the first side of the board as recited in new claim 28 of the present application. New claims 29-35 depend from claim 28 and further define the invention and are also believed patentable over the cited prior art.

In addition, new claim 35 recites that the operating member is substantially flush with the second side as disclosed

on page 26, lines 10-12 of the present application and as seen in Figure 6B, for example. The above-noted features are not disclosed by the references.

Accordingly, it is believed that the new claims avoid the rejection under §103 and are allowable over the art of record.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

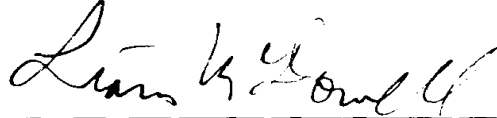


Application No. 09/739,236  
Reply to Office Action of May 28, 2003  
Docket No. 8022-1037

Please charge the fee of \$84 for the extra independent claim and \$144 for the 8 extra claims of any type added herewith, to Deposit Account No. 25-0120.

Respectfully submitted,

YOUNG & THOMPSON

A handwritten signature in cursive script, appearing to read "Liam McDowell", is written over a horizontal line.

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